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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/862,803
Filing Date: May 22, 2001
Appellant(s): KERN, BERNHARD

**MAILED
MAR 20 2007
GROUP 1700**

Michael J. Striker
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed Feb. 19, 2007 appealing from the Office action mailed May 2, 2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is deficient. 37 CFR 41.37(c)(1)(v) requires the summary of claimed subject matter to include: (1) a concise explanation of the subject matter defined in each of the independent claims involved in the appeal, referring to the specification by page and line number, and to the drawing, if any, by reference characters and (2) for each independent claim involved in the appeal and for each dependent claim argued separately, every means plus function and step plus function as permitted by 35 U.S.C. 112, sixth paragraph, must be identified and the structure, material, or acts described in the specification as corresponding to each claimed function must be set forth with reference to the specification by page and line number, and to the drawing, if any, by reference characters.

The brief is deficient because in the junction paragraph between pages 6 and 7 of the appeal brief appellant failed to set forth where in the specification for the claimed feature of "performing a production process continuously without interruption of individual casting process".

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

A substantially correct copy of appealed claims 1-7 appears on pages 19-20 of the Appendix to the appellant's brief. The minor errors are as follows: in claim 5, line 2, "with" shall be "by".

(8) Evidence Relied Upon

| | | |
|---------------|-----------------|---------|
| DE 44 31 865 | BRAUN | 3-1996 |
| US 5,358,027 | CALLIHAN ET AL. | 10-1994 |
| US 4,205,721 | JORN ET AL. | 6-1980 |
| US 5,280,847 | BLUM ET AL. | 1-1994 |
| US 5,294,096 | MULLER | 3-1994 |
| JP 63-268,559 | SUGIURA ET AL. | 11-1988 |

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 6, it is not clear what the claimed process step of "without interruption of individual casting process" is referred to and also there is a lack of antecedent basis in the specification for the claimed feature; lines 14-15, what

“losses of a quantity of the supplied liquid metal in said casting retort” are referred to? In claims 2 and 3, it is not clear how the additional solid light metal is supplied and where the antecedent basis in the specification for the claimed feature is. In claim 5, what tool device is referred to? Also, it is not clear how the metal can be solidified by simply moving the tool device away; In claim 7, what tool device is referred to? Also, there is a lack of antecedent basis in the specification for the claimed feature.

2. Claims 1-7 insofar as definite are rejected under 35 U.S.C. 103(a) as being unpatentable over DE-44 31 865 in view of Callihan et al. and further in view of either Jorn et al, Blum et al, Muller or JP 63-268,559.

DE '865 substantially shows the invention as claimed except that it does not show to provide a multiple quantity of molten metal required in the casting retort for each casting process and heating means at the lower end of the molten metal dosing chamber. However, Callihan et al. show that it is conventional to provide a multiple quantity of molten metal in the casting retort for casting a plurality of castings (See col. 3, lines 43-46; col. 5, lines 40-45). It would have been obvious to provide the casting retort of DE '865 with the multiple quantity of molten metal required for each casting when a plurality of casting are to be continuously cast. Further, each of the tertiary references shows to provide heating means at the lower end of the molten metal dosing or dispensing chamber such that to ensure free flow of the molten metal from the dosing or dispensing chamber into the casting mold. It would have been obvious to provide the heating means of the

tertiary references in the casting retort of DE '865 such that to facilitate the molten metal dispensing process.

(10) Response to Argument

a. In page 9, 1st paragraph of the appeal brief appellant stated that in accordance with the present invention the inventive method is carried out without interruption of individual casting process. However, nowhere in the specification discloses that feature. Also, it is not clear what that feature is referred to. In the junction paragraph between pages 6-7 of the appeal brief appellant stated that "lines 13-14, page 4, Figs 1-3; lines 1-2, and 8-9, page 10, Fig. 3) discloses that feature. However, none of those lines and figures discloses that feature.

b. In page 9, 3rd paragraph of the appeal brief appellant explained the reason why "a multiple of the metal quantity of final casting is required". However, the specification does not disclose the molten metal loss due to the untightness and feature of automatic tool ventilation. It is also not clear what "tool ventilation" is referred to.

c. The final official action stated (see paragraph (9)1 supra) that "in claims 2 and 3, it is not clear how the additional solid light metal is supplied and where the antecedent basis in the specification for the claimed feature is." However, appellant did not provide any explanation in the appeal brief.

d. In page 11, 1st paragraph of the appeal brief appellant stated (see paragraph (9)1 supra) that "In clam 5, what tool device is referred to? Also, it is not clear how the metal can be solidified by simply moving the tool device away".

However, page 11 of the appeal brief does not answer those questions.

e. In page 13, 2nd paragraph of the appeal brief appellant stated that the negative pressure required is not generated by the dosing device of DE '865 (appellant erroneously referred to DE '652). However, claim 1 of the instant application does not include that limitation. As a matter of fact, claim 1 recites "pumping gas under pressure into the casting retort so as to press the liquid metal into a preliminarily evacuated casting mold". Further, in DE '865, gas is supplied through pipe 44 and die cavity is evacuated through pipe 56. Thus, the process of DE '865 is the same as the instant process in that aspect.

f. In page 14, 1st paragraph of the appeal brief appellant stated that JP 63-268,559 (appellant erroneously referred to JP 063 28559) does not provide a casting mold and teach the feature of claim 1. However, JP reference is cited to show that it is conventional to provide heating means at the lower end of the molten metal dispensing chamber such that to ensure free flow of the molten metal from the dispensing chamber. In page 14, 2nd paragraph of the appeal brief appellant further stated that Callihan does not disclose the claimed process in which a production process is performed continuously in a closed loop without interruption of individual casting process with a pressure differential between the casting retort and the casting mold. However, Callihan is cited to show that it is conventional to provide a multiple quantity of molten metal in the casting retort for casting a plurality of castings (See col. 3, lines 43-46; col. 5, lines 40-45). In response to applicant's arguments against the references individually, one

cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

g. In pages 15, last paragraph and page 16, 1st paragraph of the appeal brief appellant relied on *In re Blamer* and stated that the Examiner's reliance on so many references could also be considered as "overkill". However, the number of the references applied for the rejections are three since the tertiary references used for the rejection is in an alternative format. Further, the number of references properly combinable depends on the fact of each case, *In re Lainson*, 144 USPQ 19. Furthermore, the number of references does not have a bearing on the propriety of the rejection; theoretically the number could be infinite, .

h. In pages 16 and 17 of the appeal brief appellant stated that there is no reason or suggestion to combine the prior art references. However, as stated in the final rejection, Callihan et al. show that it is conventional to provide a multiple quantity of molten metal in the casting retort for casting a plurality of castings (See col. 3, lines 43-46; col. 5, lines 40-45). It would have been obvious to provide the casting retort of DE '865 with the multiple quantity of molten metal required for each casting when a plurality of casting are to be continuously cast. Further, each of the tertiary references shows to provide heating means at the lower end of the molten metal dosing or dispensing chamber such that to ensure free flow of the molten metal from the dosing or dispensing chamber into the

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casting mold. It would have been obvious to provide the heating means of the tertiary references in the casting retort of DE '865 such that to facilitate the molten metal dispensing process. Thus, appellant's argument is moot.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,


Kuang Lin

Conferees:

Patrick Ryan

Bill Krynski

